

## A technical aid to tissue expansion

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**Summary**—A simple technique for ensuring accurate puncture of the tissue expansion dome is described.

Occasionally, due to poor dome placement or extreme adiposity, it is difficult to localise the appropriate injection site when performing the serial additions of saline to a tissue expander. Valve failure may occur when multiple unnecessary punctures of the dome are performed. It is not uncommon for an expander to be surrounded by a seroma. This may lead to confusion when one is ensuring that the tip of the injecting needle is correctly placed within the dome by withdrawal of fluid.

### **Technique**

The simple expedient of instilling 1 ml of methylene blue BPC into the expander when it is inserted will ensure the permanent staining of the contents of the expander no matter what volume is subsequently added. The appearance of blue-green fluid in the syringe or extension catheter upon withdrawal after puncture of the dome is an absolute indication of the correct placement of the needle

within the lumen of the expander. In the authors' experience there has never been any staining of seroma fluid whatsoever.

It should be stressed that this indicator will only inform the surgeon that he is within the lumen of the expander. It will not ensure that he has pierced the dome. However, with recent changes in design and thoughtful dome placement, inadvertent damage to the connection tube is unlikely.

We would commend the addition of this brief and simple step to the insertion of an expander, particularly in circumstances where the surgeon performing the expansion is not the surgeon who inserted the expander.

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